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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/783,273	02/20/2004	Jeremy A. Fogg	GEN10 P-455	7606	
28469 75	590 05/17/2005		EXAMINER		
PRICE, HENI	EVELD, COOPER, DE	YAM, STE	YAM, STEPHEN K		
LLP/GENTEX	CORPORATION				
695 KENMOO	R, S.E.	ART UNIT	PAPER NUMBER		
P O BOX 2567		2878	•		
GRAND RAPI	DS, MI 49501				

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

					H:I		
		Applic	ation No.	Applicant(s)			
Office Action Summary		10/783	3,273	FOGG ET AL.			
		Exami	ner	Art Unit			
		Stephe		2878			
Period fo	The MAILING DATE of this communi or Reply	cation appears on	the cover sheet with the	e correspondence address	S		
THE - Exte after - If the - If NC - Failt Any	MAILING DATE OF THIS COMMUNI msions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this comme period for reply specified above is less than thirty (30) period for reply is specified above, the maximum start to reply within the set or extended period for reply reply received by the Office later than three months a ed patent term adjustment. See 37 CFR 1.704(b).	CATION. of 37 CFR 1.136(a). In no unication. o) days, a reply within the setutory period will apply and will, by statute, cause the se	event, however, may a reply be statutory minimum of thirty (30) of d will expire SIX (6) MONTHS fr application to become ABANDO	e timely filed  days will be considered timely.  om the mailing date of this commun  NED (35 U.S.C. § 133).	nication.		
Status							
1)  🛛	Responsive to communication(s) file	d on 25 February	2005.				
·		tb)⊠ This action is					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims						
5)□ 6)⊠ 7)□	Claim(s) 1-23 is/are pending in the a 4a) Of the above claim(s) 8-19 is/are Claim(s) is/are allowed. Claim(s) 1-7 and 20-23 is/are rejected Claim(s) is/are objected to. Claim(s) are subject to restrice.	withdrawn from co					
Applicat	ion Papers						
9)⊠	The specification is objected to by the	Examiner.					
10)⊠	The drawing(s) filed on 20 February 2	<u>2004</u> is/are: a) <u></u> a	accepted or b)⊠ objec	ted to by the Examiner.			
	Applicant may not request that any object	tion to the drawing(s	s) be held in abeyance. S	See 37 CFR 1.85(a).			
11)	Replacement drawing sheet(s) including The oath or declaration is objected to	•	- · ·	·			
Priority (	under 35 U.S.C. § 119				•		
a)	Acknowledgment is made of a claim of All b) Some * c) None of:  1. Certified copies of the priority of Certified copies of the priority of Copies of the certified copies of application from the Internation See the attached detailed Office actions.	documents have b documents have b of the priority docu nal Bureau (PCT F	een received. een received in Applic ments have been rece Rule 17.2(a)).	ation No vived in this National Stag	j <b>e</b>		
Attachmen	• •		_				
	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (P	TO 948)	4) Interview Summa Paper No(s)/Mail				
3) 🛛 Infor	mation Disclosure Statement(s) (PTO-1449 or PNO(s)/Mail Date 0804, 0405			al Patent Application (PTO-152)	)		

Application/Control Number: 10/783,273 Page 2

Art Unit: 2878

#### DETAILED ACTION

### Election/Restrictions

- 1. Claims 8-19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

  Applicant timely traversed the restriction (election) requirement in the reply filed on February 25, 2005.
- 2. Applicant's election with traverse of Group I in the reply filed on February 25, 2005 is acknowledged. The traversal is on the ground(s) that claims 1-23 are all directed to an automatic vehicle exterior light control with an attachment member and a carrier or a mechanical image sensor repositioning means, and it is a mischaracterization to read out these limitations. This is not found persuasive because while the claims contain some common limitations, each grouping of claims as specified in the prior restriction requirement contains specific limitations not disclosed in the remainder of the claims, which provide a unique scope to each grouping.
- 3. Applicant also cites MPEP 806.05(c) and (d), specifically noting the requirement for two-way distinctness in a combination/sub-combination restriction. Examiner asserts that Examiner's restriction requirement between combination/sub-combination groups illustrated such a two-way distinctness, by providing a valid substitute for the sub-combination to properly use the combination, and to provide utility for the sub-combination other than that of the combination. Examiner also asserts that for a restriction requirement between two sub-combinations usable together, as specified in MPEP 806.05(d), cited below (emphasis placed in bold):

Application/Control Number: 10/783,273 Page 3

Art Unit: 2878

806.05(d) Subcombinations Usable Together Two or more claimed subcombinations, disclosed as usable together in a single combination, and which can be shown to be separately usable, are usually distinct from each other. Care should always be exercised in this situation to determine if the several subcombinations are generically claimed. See MPEP § 806.04(b). Form paragraph 8.16 may be used in restriction requirements between subcombinations. ¶ 8.16 Subcombinations, Usable Together Inventions [1] and [2] are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case invention [3] has separate utility such as [4]. See MPEP \$806.05(d). Examiner Note 1. This form paragraph is to be used when claims are presented to subcombinations usable together (MPEP § 806.05(d)). In bracket 3, insert the appropriate group number or identify the invention. In bracket 4, suggest utility other than with the other invention. Conclude restriction requirement with one of form paragraphs 8.21.01 through 8.21.03. Only one-way distinctness is required. The examiner must show, by way of example, that one of the subcombinations has utility

other than in the disclosed combination.

As illustrated by Examiner's previous restriction requirement, a one-way distinctness was provided by citing a different utility for one of the sub-combinations.

The requirement is still deemed proper and is therefore made FINAL.

# **Drawings**

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the shim defining a second image sensor optical axis (in Claim 22) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to because reference number 458 in Fig. 4 is broken up into 5. two lines ("45" and "8") and is confusing. The reference number should be re-written so it fits on a single line. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

# Specification

6. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a

Application/Control Number: 10/783,273

Art Unit: 2878

basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

7. The disclosure is objected to because of the following informalities:

In Page 5 of the specification, commonly assigned U.S. Patent applications listed by Attorney docket numbers should be changed to the corresponding U.S. Patent application number.

Appropriate correction is required.

8. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification does not describe the origin or specifics regarding specifically securing an imager board within 5 degrees and -5 degrees. In fact, the specification

describes securing an imager board within 2.5 degrees and -2.5 degrees (page 27, line 6) which is inconsistent with the claimed invention.

# Claim Objections

9. Claims 3, 4, and 20 are objected to because of the following informalities:

In Claims 3 and 4, line 3, "a desired image sensor optical axis" lacks proper antecedent basis, as the term is already defined in parent Claim 1.

In Claim 20, line 4, "an image sensor optical axis" lacks proper antecedent basis, as it is unclear whether the term is identical to the recited "desired image sensor optical axis".

Appropriate correction is required.

## Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 11. Claims 1, 3, 4, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Michaels et al. US 5,124,549.

Regarding Claims 1 and 20, Michaels et al. teach (see Fig. 1,3,4) an automatic vehicle exterior light/vehicle equipment control system comprising an attachment member (46) and

carrier/baffle (22, 48) configured to secure an imager board (24, 34) within approximately 5 degrees and -5 degrees of a desired image sensor optical axis (see Col. 5, lines 54-61).

Regarding Claims 3 and 4, Michaels et al. teach the imager board vertically and horizontally aligned within 5 and -5 degrees of a desired image sensor optical axis (see Col. 5, lines 54-61).

# Claim Rejections - 35 USC § 103

- 12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 13. Claims 6, 7, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michaels et al.

Regarding Claims 6, 7, 21, and 22, Michaels et al. teach the system in Claims 1 and 20, according to the appropriate paragraph above. Regarding Claims 6 and 21, Michaels et al. also teach the image sensor and an image sensor control logic (see Col. 6, lines 47-50) are integrated in a board (24) (see Col. 6, lines 47-50). Regarding Claim 22, Michaels et al. teach (see Fig. 3,4) a shim (30) positioned at least partially between the attachment member and the carrier to define a second image sensor optical axis (using lens (32)). Michaels et al. do not teach the board as a common application specific integrated chip. It is well known in the art to provide electronic components on a common application specific integrated chip (ASIC) and a common silicon wafer, to utilize common manufacturing methods to assemble the electronics. It would have

been obvious to one of ordinary skill in the art at the time the invention was made to use a common application specific integrated chip and a common silicon wafer for the board in the system of Michaels et al., to lower production costs and reduce design complication by using common manufacturing techniques.

14. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Michaels et al. in view of Stam et al. US 6,429,594.

Regarding Claim 2, Michaels et al. teach the system in Claim 1, according to the appropriate paragraph above. Michaels et al. do not teach the control system is configured to self calibrate an image area of an image sensor to compensate for minor image sensor misalignment. Stam et al. teach a similar system, with a control system is configured to self calibrate an image area of an image sensor to compensate for minor image sensor misalignment (see Col. 28, lines 3-7, 46-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the control system configured to self calibrate an image area of an image sensor to compensate for minor image sensor misalignment, as taught by Stam et al. in the system of Michaels et al., to increase accuracy and compensate for small angle aiming variations, as taught by Stam et al. (see Col. 10, lines 40-55).

15. Claims 5 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michaels et al. in view of Blank et al. US 4,708,410.

Regarding Claim 5, Michaels et al. teach the system in Claim 1, according to the appropriate paragraph above. Michaels et al. also teach the system in a rearview mirror

Page 10

Art Unit: 2878

assembly (see Col. 3, lines 26-29). Michaels et al. do not teach a ball for attachment of a rearview mirror assembly. Blank et al. teach (see Fig. 3B and 4A) a rearview mirror assembly with a ball for attachment (see Col. 6, lines 34-63). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a ball for attachment of a rearview mirror assembly as taught by Blank et al. in the system of Michaels et al., to provide simple and effective attachment of the rearview mirror assembly to the vehicle.

Regarding Claim 23, Michaels et al. teach the system in Claim 20, according to the appropriate paragraph above. Michaels et al. do not teach at least one additional device selected from the group comprising: an electro-optic mirror element; an ambient light sensor; a glare light sensor; an information display; an indicator; a microphone; a compass; an operator interface; a temperature indicator; a Bluetooth interface; a wireless transceiver; a vehicle bus interface; a passenger side restraint status display and an electro-optic mirror element control. Blank et al. teach (see Fig. 3A) a similar system with a compass (62). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a compass as taught by Blank et al. in the system of Michaels et al., to provide additional functionality in the rearview mirror system for user convenience.

# Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Yam whose telephone number is (571)272-2449. The examiner can normally be reached on Monday-Friday 8:30am-5pm.

Application/Control Number: 10/783,273 Page 11

Art Unit: 2878

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on (571)272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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